



Comments from the Pew Research Center's Internet & American Life Project in the Matter of: *Empowering Parents and Protecting Children in an Evolving Media Landscape*

FCC 09-94, MB Docket No. 09-194

About the Pew Research Center's Internet & American Life Project

The [Pew Research Center's Internet & American Life Project](#) is one of seven projects that make up the [Pew Research Center](#), a nonpartisan, nonprofit "fact tank" that provides information on the issues, attitudes and trends shaping America and the world. The Project produces reports exploring the impact of the internet on families, communities, work and home, daily life, education, health care, and civic and political life. The Project aims to be an authoritative source on the evolution of the internet through surveys that examine how Americans use the internet and how their activities affect their lives.

The Pew Internet Project takes no positions on policy issues related to the internet. It does not endorse technologies, industry sectors, companies, nonprofit organizations, or individuals. The research and reports highlighted in this document and addendum are submitted for the purposes of informing the discussion around youth and technology use, but the Project does not advocate for or against any specific regulatory actions regarding children and media.

Overview

By Mary Madden, Senior Research Specialist

As noted in the Federal Communications Commission's NOI (Notice of Inquiry) on *Empowering Parents and Protecting Children in an Evolving Media Landscape*, the nature of children's access to the internet has changed in critically important ways over time. While we have reported in the past that most parents place the computers their children use in shared areas of the home, that form of oversight does not take into account the many other wireless internet access points that teens now encounter, including cell phones, portable gaming devices and internet-enabled iPods.¹ Ownership of these devices among American teenagers ages 12-17 has been steadily growing, and children increasingly access the internet in "third places," outside of the traditional home and educational environments—often via mobile devices. In a 2008 survey of teens and their parents, we found that 45% said they used the internet in a location other than their home, school or library.

This mobile transition is especially significant in the context of this NOI because the proliferation of wireless internet access creates significant new challenges for parents, educators and policymakers who now have to consider and monitor multiple access points. It is also important to note that younger teens (12-14) are just as likely have their own cell phone as they are to have their own computer, and as such, web-enabled mobile devices play an important role in the development of digital media literacy skills. Furthermore, parents' behavior and attitudes towards technology are a critical factor in predicting a child's experience and approaches towards media. One need not look much further than seeing a toddler playing with game applications on her father's iPhone to observe that children's exposure to media begins at ever-earlier ages and is heavily influenced by parental modeling.

Our most recent report on teenagers and technology use, [*Social Media and Mobile Internet Use Among Teens and Young Adults*](#) (Released February 3, 2010), includes our latest estimates of internet use and gadget ownership among U.S. teenagers ages 12-17. When possible, findings from this report are noted below. However, on some subjects that were not covered in the 2010 report, we refer to older reports and data.

For ease of reference, we have followed the same organizational schema employed in the NOI. Our document addresses three major areas highlighted by the FCC: 1) Children's Media Use, 2) Benefits of Electronic Media for Children and 3) Risks of Electronic Media for Children.

This document is meant to serve as a roadmap to guide readers to delve deeper into our work, where each of these issues is addressed in greater detail. All of the reports and

¹ For more information, see *Teens, Privacy and Online Social Networks*: <http://bit.ly/SharedAccess>

presentations from which we have highlighted findings are also listed in the attached Addendum.

Issues for Comment:

A. Children's Media Use

a. Current media environment and demographic trends:

Source: [Social Media & Mobile Internet Use Among Teens and Young Adults](#) (2010)

- a. Nearly seven in ten (69%) teens ages 12-17 have a **desktop or laptop computer**. Teens from wealthier families earning more than \$75,000 a year are slightly more likely (74%) than less well-off teens to personally have a desktop or laptop computer. Older teens are also more likely to report owning a desktop or laptop; 73% of 14-17 year olds have a computer while 60% of 12 and 13 year olds do.
- b. **Cell phone** ownership is nearly ubiquitous among teens and young adults, and much of the growth in teen cell phone ownership has been driven by adoption among the youngest teens. Three-quarters (75%) of teens and 93% of adults ages 18-29 now have a cell phone. In the past five years, cell phone ownership has become mainstream among even the youngest teens. Fully 58% of 12-year olds now own a cell phone, up from just 18% in 2004.
- c. Fully 80% of teens between the ages of 12 and 17 have a **game console** like a Wii, an Xbox or a PlayStation. While younger and older teens are equally likely to have a game console, boys are more likely than girls to have one. Nearly 9 in 10 (89%) boys have a game console, while 70% of girls report ownership. Younger teens, ages 12 to 15 are more likely to own a game console than 16-17 year olds.
- d. Half of teens (51%) have a **portable gaming device** like a PSP, DS or a Gameboy. Unlike other tech gadgets, portable gaming devices are more often owned by younger teens, with two-thirds (66%) of teens ages 12-13 owning a portable game player compared with 44% of 14 to 17 year olds. As with consoles, boys are more likely than girls to own a portable gaming device; 56% of boys own one, as do 47% of girls. Beyond the age and gender differences in ownership, portable and console gaming platforms

are equally likely to be found in households regardless of race, ethnicity, household income or parent's education.

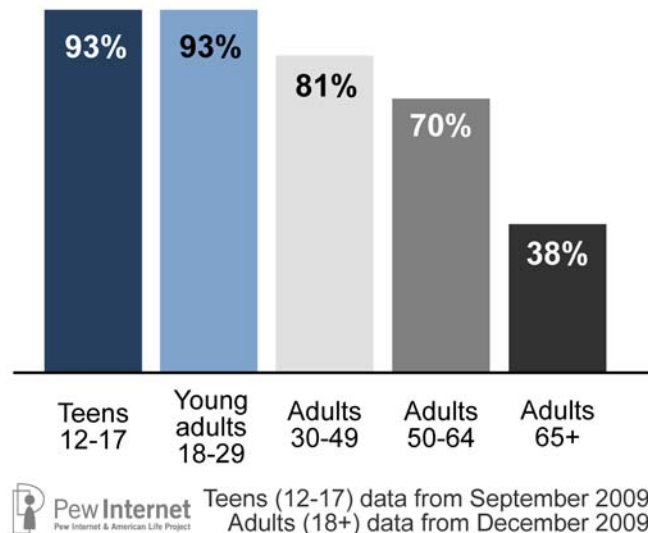
- e. Nearly four in five teens (79%) have an **iPod or other mp3 player**. Ownership of music players cuts across most demographic and age groups, with all groups just about as likely to own an mp3 player as another. The exceptions to this are parent's educational attainment and family income. As family income and education rises, so does the likelihood of a teen owning an mp3 player or iPod.

b. Internet access

Source: [Social Media & Mobile Internet Use Among Teens and Young Adults](#) (2010)

- a. 93% of teens now go online to **use the internet or email**, and 63% do so daily. Teens and young adults continue to surpass older groups of adults in their internet use.

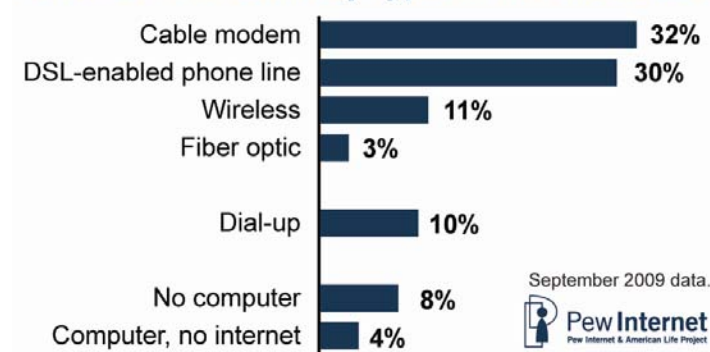
Who's online? The internet by age groups



- b. Among families with children between 12 and 17, more than three-quarters (76%) now have **broadband** internet access at home, up from 71% in February 2008 and significantly larger than in 2004, when just half of all households with teens had some type of broadband access. In 2009, about a third of all internet using families have a cable modem (32%), another third (30%) have a DSL enabled phone line, and another 11% report a wireless

internet connection. Three percent of families have a fiber optic connection.

Families with teens by type of internet access



- c. There are also differences in broadband uptake by particular demographic categories. The biggest variation is around parents' **income and education** levels, although there are also some smaller differences around race and ethnicity. Lower income households with teens and households where the parents have lower levels of education are less likely than their wealthier and better-educated counterparts to have broadband access at home. White families are somewhat more likely than African-American families to have broadband at home.

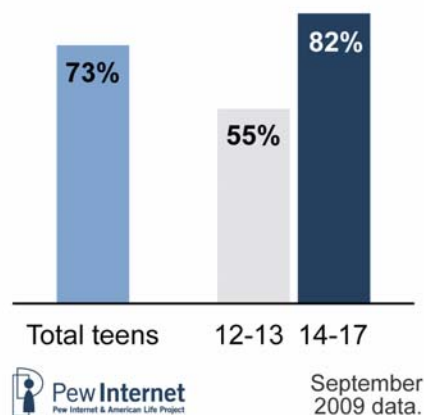
- **Parent Income:** Among teens ages 12-17 whose parents earn less than \$30,000 per year, 58% have broadband at home, compared with 92% of those with household incomes of \$75,000 or more.
- **Parent Education:** Among teens ages 12-17 whose parents have less than a high school education, 57% have broadband at home compared with 92% of those with a college degree.
- **Parent Race/Ethnicity:** Teens whose parents identify as White (non-Hispanic) are more likely than teens with African-American parents to have broadband at home (79% vs. 68%).

c. Youth and Social Media Use

Source: [Social Media & Mobile Internet Use Among Teens and Young Adults](#) (2010)

- a. Teens continue to be avid users of **social networking websites** – as of September 2009, 73% of online American teens ages 12 to 17 used an online social network website, a statistic that has continued to climb upwards from 55% in November 2006 and 65% in February 2008.

% of online teens on SNS



- b. In comparison, **blogging** has declined in popularity among both teens and young adults since 2006. Blog commenting has also dropped among teens.
 - 1. 14% of online teens now say they blog, down from 28% of teen internet users in 2006. This decline is also reflected in the lower incidence of teen commenting on blogs within social networking websites; 52% of teen social network users report commenting on friends' blogs, down from the 76% who did so in 2006.
 - 2. By comparison, the prevalence of blogging within the overall adult internet population has remained steady in recent years. Pew Internet surveys since 2005 have consistently found that roughly one in ten online adults maintain a personal online journal or blog.
- c. Teens ages 12-17 do not use **Twitter** in large numbers – just 8% of online teens 12-17 say they ever use Twitter, a percentage similar

to the number who use virtual worlds. This puts Twitter far down the list of popular online activities for teens and stands in stark contrast to their record of being early adopters of nearly every online activity.

d. Where children use media

Sources: [Social Media & Mobile Internet Use Among Teens and Young Adults](#) (2010), [Writing, Technology and Teens](#) (2008)

- a. As noted above, the nature of internet access is changing such that teens are increasingly **mobile** in their internet use. Overall, the computer still remains the most popular way for teens to go online, with 93% of teens with a desktop or laptop computer using the device to go online. But other more portable technologies are also now providing new paths to the internet. Among teen cell phone users, more than a quarter (27%) say they use their cell phone to go online. Similarly, 24% of teens with a game console (like a PS3, Xbox or Wii) use it to go online. Other handheld gaming devices also allow internet connectivity—among teens with a portable gaming device, about one in five (19%) use it for this purpose. ([2010](#))
- b. A child's home, school and library continue to provide critical points of access to the internet for U.S. teens.
 1. Among teenage internet users, 89% go online from **home**, 77% do so from school, 71% do so from a friend or relative's house and 60% do so from a library. ([2008](#))
 2. **Schools and libraries** play a particularly important role in providing internet access to minorities and teens in lower-income households. For example, 99% of online teens in households earning \$75,000 or more per year use the internet from home, while 74% go online from school and 57% go online from a library. By contrast, just 70% of online teens in households earning less than \$30,000 per year go online from home, but 75% have access at school and 72% go online from the library. ([2008](#))
 3. For many **minority and lower-income teens**, schools and libraries serve as a primary source of internet access. While 93% of teenage internet users go online from more than one location, schools and libraries serve as a primary source of internet access for many minority and lower-

income teens. Among online teens living in households earning less than \$30,000 per year, 56% go online most often from home, one quarter (26%) do so from school and 17% go online most often from somewhere else (such as a library or friend's house). By contrast, 87% of teens in households earning more than \$75,000 per year go online most often from home, and just 11% go online primarily from school. Just 1% of high-income teens rely primarily on somewhere other than school or home for internet access. ([2008](#))

4. Locations of access also vary by **race and ethnicity** in important ways. One quarter of African-American teens who use the internet do so most often from school, while 63% get most of their internet access at home. In contrast, eight in ten white teens (81%) go online primarily from home and just 15% do so primarily from school. ([2008](#))
5. **Age** also plays a role in where teens go online, as older teens are more likely to go online from school or from a friend or relative's house. ([2008](#))

B. Potential benefits of media use

a. How youth use technology to reinforce existing relationships with peers

Sources: [Social Media & Mobile Internet Use Among Teens and Young Adults](#) (2010), [Teens and Distracted Driving](#) (2009), [Social Networking Websites and Teens](#) (2007)

- a. A bit more than a third (37%) of social network-using teens say they **send messages to friends** every day through the social sites. ([2010](#))
- b. About half of teen social network users send bulletins or **group messages** to friends from within social network sites. ([2010](#))
- c. Two-thirds of social network-using teens **send private messages** to friends on the sites. ([2010](#))
- d. Overall, previous surveys have shown that 91% of all social networking teens say they use the sites to stay in touch with friends they see frequently, while 82% use the sites to stay in touch with friends they rarely see in person. ([2007](#))

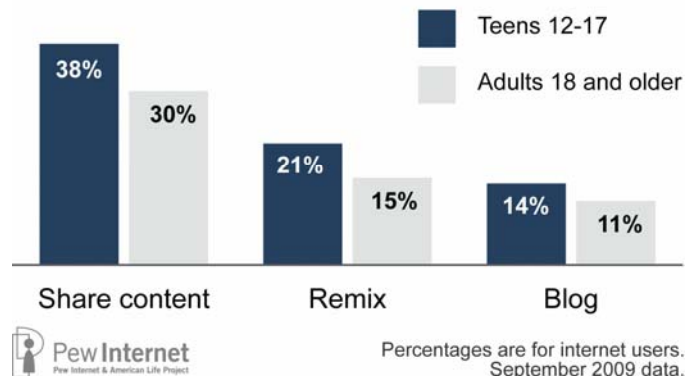
- e. While teens continue to be enthusiastic users of social networking sites, it should be noted that recent changes in their communication patterns on the sites suggest they are somewhat **less tethered** to their profiles. Teens have remained steady or even shown a slight decline in their likelihood of using social network sites to connect with friends. ([2010](#))
- f. At the same time, the sending and receiving of text messages (texting) has become an essential tool of teen social life. Fully **75% of all American teens ages 12-17 own a cell phone, and 66% use their phones to send or receive text messages**. Older teens are more likely than younger teens to have cell phones and use text messaging; 82% of teens ages 16-17 have a cell phone and 76% of that cohort are cell texters. ([2009](#))

b. The impact of communications technology on teen writing and creativity

Sources: [Social Media & Mobile Internet Use Among Teens and Young Adults](#) (2010), [Writing, Technology and Teens](#) (2008)

- a. In the past, we have highlighted the way American teens are utilizing the interactive capabilities of the internet as they create and share their own media creations. Overall, **the rates of teen content creation continue to surpass that of adults**. Recent data suggests that some online content creating activities have remained constant over time, while others have shown slight or even significant declines since 2006. ([2010](#))

Content creation activities



- b. 85% of teens ages 12-17 engage at least occasionally in some form of electronic personal communication, which includes text

messaging, sending email or instant messages, or posting comments on social networking sites. However, 60% of teens do not think of these electronic texts as “writing.” ([2008](#))

- c. When asked to evaluate how the writing their child does on the internet (such as email, instant messaging or posting on social networking sites) impacts his or her overall writing abilities, the largest group—two-fifths of parents (40%)—feel that these communications have no discernable impact. Among parents who feel that these communications do have some impact, half (**27% of all parents**) feel that these communications make their child a **better writer** and half (also 27% of all parents) feel that their child is a poorer writer as a result of the writing he or she does online. An additional 5% of parents are not sure how their child’s electronic communications impact their overall writing skills. ([2008](#))
- d. Of the eight writing and technology impacts we evaluated, three **positive impacts** resonate relatively strongly with parents. These include that using a computer for writing allows teens to “write better because they can revise and edit easily,” “present ideas clearly” and “be creative.” Yet, while these positive impacts appeal to parents, 40% of parents also believe that computers have a **negative impact** on their child’s writing, by causing them to take short cuts, use poor spelling and grammar and write too fast or be careless in their writing. ([2008](#))

c. Educational content

a. Educational content offered on electronic platforms

Source: [Teens, Video Games and Civics](#) (2008)

- a. 34% of American teens have played a computer or console game at school as part of a **school assignment**.
- b. Lower-income teens (41%) and teens from homes with lower overall education levels (41%) are more likely than their counterparts (29%) to have played a game for school. Black teens (46%) are more likely than white teens (32%) to have played a game at school for educational purposes. Younger teens

are also more likely to have played a game at school than older teens: 40% of teens ages 12-14 have played a game at school as part of a school assignment, while 29% of teens ages 15-17 have done so.

b. Other: Use of internet in a school setting

Source: [Writing, Technology and Teens](#) (2008)

- a. The internet is not just a near-ubiquitous technology in the lives of American teens; it is also their **primary method** for conducting research for school. Fully 94% of teens use the internet at least occasionally to do research for their school writing assignments. Nearly half (48%) do so once a week or more, while one quarter (26%) do so several times a month. Using the internet to research school writing assignments is most common among older teens and those from higher-income households.

c. Other: Civic engagement

- 1. Source: [Teens, Video Games and Civics](#) (2008): The characteristics of game play and the contexts in which teens play games are **strongly related** to teens' interest and engagement in civic and political activities.

C. Potential risks of electronic media for children

a. Physical and Other Safety Concerns

1. Sexting

Source: [Teens and Sexting](#) (2009)

- i. **4% of cell-owning teens** ages 12-17 say they have sent sexually suggestive nude or nearly nude images of themselves to someone else via text messaging (also known as "sexting").
- ii. **Older teens are much more likely to send and receive these images**; 8% of 17-year-olds with cell phones have sent a sexually

provocative image by text and 30% have received a nude or nearly nude image on their phone.

- iii. **The teens who pay their own phone bills are more likely to send “sexts”:** 17% of teens who pay for all of the costs associated with their cell phones send sexually suggestive images via text; just 3% of teens who do not pay for, or only pay for a portion of the cost of the cell phone send these images.

2. Distracted Driving

Source: [Teens and Distracted Driving](#) (2009)

- a. One in three (34%) texting teens ages 16-17 say they have **texted while driving**. That translates into 26% of all American teens ages 16-17.
- b. Half (52%) of cell-owning teens ages 16-17 say they have **talked on a cell phone while driving**. That translates into 43% of all American teens ages 16-17.
- c. 48% of all teens ages 12-17 say they have been in a car when the driver was texting.
- d. 40% say they have been in a car when the driver used a cell phone in a way that put themselves or others in danger.

b. Exposure to inappropriate content

Sources: [Teens and Sexting](#) (2009), [Teens, Video Games and Civics](#) (2008)

- a. **15% of cell-owning teens** ages 12-17 say they have received sexually suggestive nude or nearly nude images of someone they know via text messaging on their cell phone. ([2009](#))

- b. Two-thirds of teens reported playing “action” or “adventure” games, some of which contain considerable **violent content**. 32% of gaming teens report that at least one of their three favorite games is rated Mature or Adults Only. ([2008](#))
- c. Of teen gamers who play **Mature and Adult-Only-rated games**, 79% are boys and 21% are girls. Furthermore, 12- to 14-year-olds are equally likely to play M- or AO-rated games as their 15- to 17-year-old counterparts. Nearly three in ten (28%) of 12- to 14-year-olds list an M- or AO-rated game as a favorite, as do 36% of teens ages 15-17. ([2008](#))

c. Encouraging aggressive behavior

Source: [Teens, Video Games and Civics](#) (2008)

- a. Nearly two-thirds (63%) of teens who play games report seeing or hearing “people **being mean and overly aggressive** while playing,” and 49% report seeing or hearing “people being hateful, racist, or sexist” while playing. However, among these teens, nearly three-quarters report that another player responded by asking the aggressor to stop at least some of the time. Furthermore, 85% of teens who report seeing these behaviors also report seeing other players being **generous or helpful** while playing. We found no relationship between parental monitoring and teens’ exposure to these experiences.

d. Harassment

Source: [Cyberbullying](#) (2007)

- a. About one third (32%) of all teenagers who use the internet say they have been targets of a range of **annoying and potentially menacing online activities** – such as receiving threatening messages; having their private emails or text messages forwarded without consent; having an embarrassing picture posted without permission; or having rumors about them spread online.

- b. **Two-thirds of all teens (67%) said that bullying and harassment happens more *offline* than online.** Fewer than one in three teens (29%) said that they thought that bullying was more likely to happen online, and 3% said they thought it happened both online and offline equally.

e. Sexual predation

Source: [Teens and Online Stranger Contact](#) (2007)

- a. About a third of online teens (32%) have been contacted by “someone with no connection to you or any of your friends”, and nearly a quarter of those contacted say that they felt scared or uncomfortable as a result. Please note that this definition of stranger contact may include a range of direct and indirect communications, including but not limited to: social networking site friend requests, spam email, or comments on a personal blog or photo sharing site.
- b. Despite popular concerns about teens and social networking, our analysis suggests that **social networking sites are not inherently more inviting to scary or uncomfortable contacts than other online activities.** Among teens who have been contacted by a stranger online, 21% of profile-owning teens say they felt scared or uncomfortable as a result of this contact, compared with 28% of non-profile owners. This result is not necessarily surprising since nearly half (49%) of social networking teens use these sites to make new friends—in other words, connect with people they do not currently know. It may also be the case that profile-owning teens see some level of unwanted contact as a known downside of maintaining a social networking profile and view it as a relatively minor “cost of doing business” in this environment.

f. Managing Privacy Online

Source: [Teens, Privacy and Online Social Networks](#) (2007)

- a. Of the 55% of online teens with profiles on social network sites in 2007, **most of them restrict access to their profile in some way**. Of those with profiles, 66% say their profile is not visible to all internet users. Of those whose profile can be accessed by anyone online, nearly half (46%) say they give at least some false information. Teens post fake information to protect themselves and also to be playful or silly.

b. Protecting children from risks

a. Non-technical solutions and household media rules

Source: [Teens, Video Games and Civics](#) (2008)

- a. 90% of parents of gamers say they always or sometimes know what games their children play.
- b. 72% say they always or sometimes check the ratings before their children are allowed to play a game.
- c. 46% of parents say they always or sometimes stop their kids from playing a game.
- d. 31% of parents say they always or sometimes play games with their children.

Source: [Teens, Privacy and Online Social Networks](#) (2007)

- e. 85% of parents of online teens say they have rules about **internet sites** their child can or cannot visit.
- f. 75% of parents of online teens say they have rules about the **television shows** their child can watch.
- g. 69% say they have household rules for **how long a teen can spend online**, compared with 57% of parents of online teens who say they restrict the amount of time their child spends watching TV, and the 58% who limit time spent playing video games.
- h. 65% of parents of online teens say they restrict the kinds of **video games** their child can play.

Afterword

We hope that these findings will help to inform the debate and discussion around the rulemaking process as the FCC continues its important work to give parents and children the tools and guidance they need to better navigate the evolving media landscape. In light of the topics discussed above, we see a great need for additional studies that provide impartial and timely research on youth and technology use. There have been many exceptional contributions to the field in recent years, but the expense of conducting interviews with youth—particularly in light of cell-phone interviewing limitations—means that reliable national samples of teenagers and their parents are far less common than comparable adult samples.

As noted in the Overview, this document provides highlights from our recent research in direct response to the FCC’s primary areas of inquiry. However, we have been researching youth and technology use since 2000, and we encourage interested readers to visit our website to see the breadth of our work. All of our reports, datasets and presentations are freely available on our website at: www.pewinternet.org